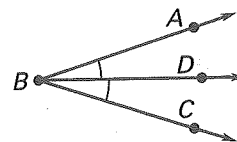


Practice A

For use with pages 60–66

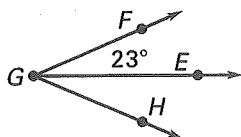
Complete the statement for the diagram at the right.

1. is bisected by .
2. The measure of $\angle ABC$ is the measure of $\angle ABD$.

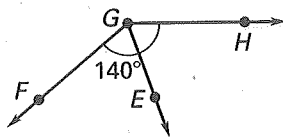


\overrightarrow{GE} bisects $\angle FGH$. Find the angle measure.

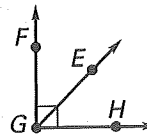
3. Find $m\angle EGH$.



4. Find $m\angle FGE$.

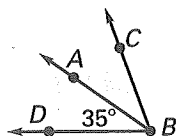


5. Find $m\angle EGF$.

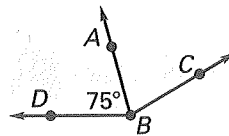


\overrightarrow{BA} bisects $\angle DBC$. Find $m\angle CBA$ and $m\angle DBC$.

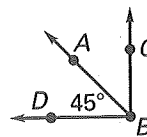
- 6.



- 7.

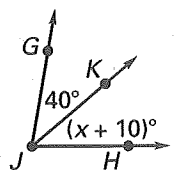


- 8.

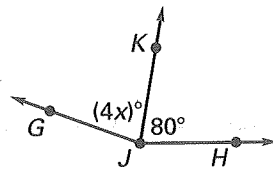


\overrightarrow{JK} bisects $\angle GJH$. Find the value of x .

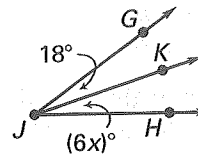
- 9.



- 10.

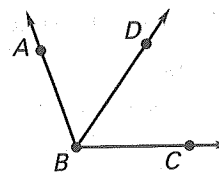


- 11.

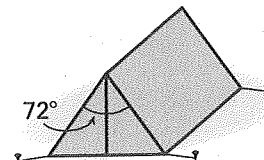


Use the diagram at the right. Decide whether the statement is *true* or *false*.

12. If \overrightarrow{BD} bisects $\angle ABC$, then $\angle ABD \cong \angle DBC$.
13. If \overrightarrow{BD} bisects $\angle ABC$, then $\angle DBC \cong \angle ABD$.
14. If \overrightarrow{BD} bisects $\angle ABC$ and $m\angle ABD = 55^\circ$, then $m\angle DBC = 55^\circ$.
15. If \overrightarrow{BD} bisects $\angle ABC$ and $m\angle ABC = 112^\circ$, then $m\angle ABD = 61^\circ$.



16. In the pup tent shown at the right, the two sides meet at the top to form a 72° angle. If the tent pole bisects the angle, what angle does the tent pole make with each of the sides?

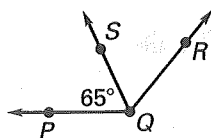


Practice B

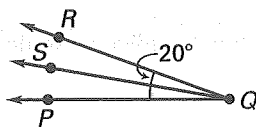
For use with pages 60–66

\overrightarrow{QS} bisects $\angle PQR$. Find the angle measure.

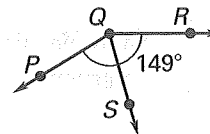
1. Find $m\angle SQR$.



2. Find $m\angle PQS$.

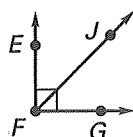


3. Find $m\angle RQS$.

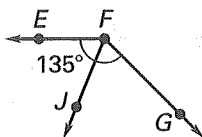


Find the measures of $\angle EFJ$ and $\angle JFG$.

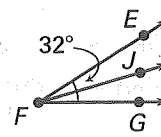
4.



5.

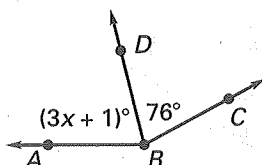


6.

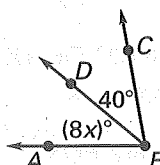


$\angle ABC$ is bisected by \overrightarrow{BD} . Find the value of x .

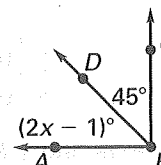
7.



8.



9.



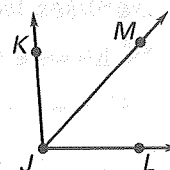
Use the figure at the right to complete the statement.

10. If $\angle KJM \cong \angle MJL$, then $\underline{\hspace{1cm}}$ is an angle bisector.

11. If \overrightarrow{JM} bisects $\angle KJL$, then $m\angle \underline{\hspace{1cm}} = m\angle \underline{\hspace{1cm}}$.

12. If \overrightarrow{JM} bisects $\angle KJL$ and $m\angle MJL = 48^\circ$, then $m\angle \underline{\hspace{1cm}} = 48^\circ$.

13. If \overrightarrow{JM} bisects $\angle KJL$ and $m\angle KJM = 46^\circ$, then $m\angle KJL = \underline{\hspace{1cm}}^\circ$.



14. When an air hockey puck is hit into the sideboards, it bounces off so that $\angle 1$ and $\angle 2$ are congruent. Find $m\angle 1$ and $m\angle 2$.

